



**MINISTRY OF NATIONAL PLANNING HOUSING AND INFRASTRUCTURE**  
MALE', REPUBLIC OF MALDIVES

**TERMS OF REFERENCE**  
**STRATA MANAGEMENT SYSTEM DEVELOPMENT**

Reference No: (IUL)471-CDS3/1/2021/180

Date: 16<sup>th</sup> October 2021

**1. GENERAL INFORMATION AND BACKGROUND**

The Government has introduced initiatives to support and regulate new economic agenda throughout the islands of Maldives with the intention of promoting more efficient public expenditure on economic and social services. With these new initiatives, the Government of Maldives aims to provide extensive support in strengthening the level of intervention in the housing sector.

In support of the president's pledges under the Strategic Action Plan, the Ministry of National Planning, Housing and Infrastructure (MNPHI) has completed and submitted the "Strata Titles Bill" or "Emmedhu Imaaraikurumuge Bill" to Parliament for approval during 2019. The current application and registration process is lengthy and time consuming, as well as difficult to manage with an increasing number of applications. Therefore, the Ministry is working to enhance a harmonized approach for registrations and management of strata schemes. Thus, developing the platform will address the current and future issues of registration and management process. It's aimed to provide sufficient information to citizens, improve availability of data, strengthen coordination and prevent duplication in delivery of support to individuals and companies in real estate developments.

**2. SCOPE OF WORK**

The Task of the Development team is to be developing several required Information and communication Technology systems. This will be done by assessing the received requirements from the project team, deciding on the most convenient information system to handle and present the data, and transforming the design into a functional program along with its related modules (Back-end. API, Web Portal, Mobile Application). This will involve a close coordination with the assigned team by MNPHI.

Developer shall perform the following tasks and responsibilities coordinating with the MNPHI team.

1. The application consists mainly following component
  - a. API
  - b. Web Components
  - c. Databases
2. Develop APIs that integrated to application use by local Authorities or Integrated APIs of local Authorities into system
3. Develop Web Application with (Front and Back-end for public, and MNPHI) responsive web interfaces using latest technology needs and application should support (portable web app) PWA
4. The application must easy scale Horizontally by each component should
5. Develop advanced data visualization tools

6. Receive the final graphic web design from a web designer and perform all necessary steps to build the new software to achieve a final satisfactory working version.
7. Develop the CMS for the website/portal using divers' languages.
8. Regularly report to the MNPHI committee on the process of the software development.
9. Providing technical assessment, feedback and recommendations related to the progress of work done.
10. Performing initial application testing/debugging, in particular unit testing and integration tests procedures in addition to regression testing whenever required.
11. Performing the database design/modifications and implementation of the various database objects and functionalities that are to support the application development effort and requirements.
12. Preparing and submitting the required technical deliverable, in particular the detailed design reports, the application source codes, the test result log, and other documents and artifacts as detailed in the deliverable section below.
13. Being ready to work on a testing host server to put the developed version and any new software changes daily.
14. Training staff designated by the committee by MNPHI for the use of the final version.
15. Perform any other tasks requested by the committee by MNPHI related to the development of the software.
16. Performing all fixes/new components required by the MNPHI during the agreed duration.

### 3. **BIDDERS QUALIFICATIONS**

1. The participating Bidder shall be registered local firm and the Bidder firm shall have the following minimum qualifications;

PARTICULARS	REQUIRED QUALIFICATIONS;
<b>a. Years of experience</b>	Shall have minimum of <b>THREE (3) years of experience</b> in the field of software development having successfully undertaken and completed software development projects in Maldives.
<b>b. Minimum number of projects Undertaken</b>	Shall have undertaken at least <b>TWO (2)</b> software development projects within the last 5 years

2. Non-compliance to both (a) and (b) qualification requirements above constitute a ground to be classified as NON-ELIGIBLE.
3. The bidder must be a locally registered company or partnership.
4. The Bidder shall demonstrate that he has adequate core team of experienced and competent technical personnel including experience in Php, JavaScript (JS) and in Mobile App development on both iOS and Android platforms.
5. The development team members should be Maldivians.
6. The Bidder shall also demonstrate that it has on-going projects whether or not similar in nature with this project to be bid out by MNPHI

**4. TECHNICAL QULAIFICATIONS**

1. The bidder with experience in Linux-Apache-MySQL-PHP (LAMP) application development may bid for this project. The team should consist of the following members at the minimum;

<b>ROLE</b>	<b>EXPERIENCE REQUIREMENT</b>	<b>ACADEMIC QUALIFICATION</b>
Lead Developer	At least 5 years of experience directing the development team in the design, development, coding, testing, and debugging of applications	Masters / Bachelor's degree in information systems, information technology, computer science, or similar.  Certified Scrum Master (CSM) preferred  Any certification is added advantage related field
Database Engineer	At least 3 years' experience in database engineering.  In-depth knowledge of Structured Query Language (SQL).	Bachelor's degree in information systems, information technology, computer science, or similar.  Any certification is added advantage related field.
Frontend	At least 3 years of experience in a similar role  Good knowledge of advanced JavaScript libraries and frameworks, such as AngularJS, React JS, Vue JS etc.	Bachelor's degree in computer science, computer engineering or a related field.  Certified Customer Service Specialist (CSS)  Any Professional Certification in Front-End Web Development
Backend	At least 5 years of experience in a similar role  Good knowledge of advanced Php libraries and frameworks, such as Laravel, Symfony, Zen, etc.  Fluency languages, PHP operating systems may be required.	Bachelor's degree in computer programming, computer science, or a related field'  Any Professional Certification in Back-End Web Development will be added advantage.

**Notes:**

1. Reference/Work experience letters must include details of work, duration of work and name of
2. Details of team members with role must be clearly mentioned in the proposal and all academic qualification must be accredited from relevant institution/Authority in Maldives. If not, bid will be disqualified.
3. For each role there shall be separate person.

projects completed.

## 5. EXPECTED OUTPUTS AND DELIVERABLES

Progress towards achieving each task during the contract will be monitored on a regular basis and with reference to a clear set of deliverables, including, where needed/applicable:

1. The Work Procedure.
2. Initial and Final Application Development detailed plan and evaluation of the start status and final status.
3. The Detailed Application Specifications Document.
4. The Functional documentation.
5. The ERD (entity relationship diagram).
6. Object and Class diagram.
7. Database Entity-Relationship Diagram.
8. The Documentation about database procedures.
9. The Comments fields for all database tables
10. Application detailed design report
11. Issues Logs.
12. Weekly Progress Reports.
13. Finalized Coding Standards and Conventions Document.
14. Application test plans.
15. Feedback / Change Documentations
16. Training sessions for MNPHI staff
17. Source codes of the application.
18. End-of-mission report that concludes the mission and assesses it.
19. The Database: including the mdf and the ldf file, filled with the latest version of data.
20. Return All Data source after project.
21. Return all related electronic materials after the project.
22. The Technical documentation includes the installation documentation and the detailed application specifications document.
23. The Help program: user and administrator manual documentation and any other software training materials related to the developer and the user.
24. All user profiles and access credentials: including the administrator profile and any related password to the database or source code related to the software.
25. Procedure of backup and the disaster recovery plan.
26. Any other information related to the software.
27. Quality Assurance and test results.
28. Developers' manuals.
29. Developer should host final version of the application on host that provided by MNPHI

## 6. FEE PROPOSAL AND PAYMENTS

The Bidder is expected to include the lump sum fee to carry out the tasks specified on the TOR on their proposal. The price proposed must be stated in both writing and in figure, and any proposal which has unclear statements, may be rejected. The payments are made upon satisfactory completion and acceptance by MNPFI for the deliverables.

The details as following:

No.	Phase (Deliverables / Conditions)	Fee (%)	Sum Up (%)
1.	Advance Payment	15%	15%
2.	Approval of system analysis design	15%	30%
3.	Completion and Submission of application for beta testing	20%	50%
4.	Approval of beta testing	30%	80%
5.	Final Installation and handing over	20%	100%

**Note: The winner of bid is required to present a performance guarantee of 5% of the total price prior to signing the contract.**

## 7. TIMEFRAME

The bidder should propose detail time frame for completing the project including milestones of this project and shall not exceed 1 year, starting from the commencement of the project.

## 8. REPORTING ARRANGEMENTS

The bidder will work under the overall guidance and direct supervision of the MNPFI Team. As the project will be time constrained, the consultancy firm will provide weekly update on the progress during the project.

## 9. EVALUATION OF THE PROPOSALS

Technical evaluation will be done based on the following criteria:

Category	Marks Allocated %	Evaluation Criteria
a) Team Composition	40 %	<p>Points for specific team members will be allocated based on following;</p> <p>Team Leader: Academic qualification (14 marks), experience (20 marks).</p> <p>Database engineer: Academic qualification (10 marks), experience (12 marks).</p> <p>Backend: Academic qualification (10 marks), experience (12 marks).</p> <p>Front end: Academic qualification (10 marks), experience (12 marks).</p> <p>Total marks: 100</p> <p>Notes:</p> <ul style="list-style-type: none"><li>- Details of team members with role must be clearly mentioned in the proposal and all academic qualification must be accredited from relevant institution/Authority in Maldives. if not, bid will be disqualified.</li><li>- For each role there shall be separate person.</li><li>- Reference letters must include details of work, duration and name of projects completed.</li></ul>
b) Price	40 %	<p>Formula below to be used to;</p> <p><math>\text{Lowest price} / \text{price on proposal} \times \text{percentage} = \text{Total \% in price}</math></p>
c) Duration	20 %	<p>Marks will be allocated based on the delivery period. Highest marks will be allocated to the quickest delivery period.</p> <p><math>\text{Shortest duration} / \text{Duration on proposal} \times \text{percentage} = \text{Total \% in Duration}</math></p>
Total	100%	

## 10. CONTENTS OF PROPOSAL

1. Cover letter
2. Price proposal as per the ANNEX 2
3. Details of Team Member with role as per ANNEX 1 (Additional details to be attached as Annex, including CVs of Team members, work experience letters in relevant field, and academic qualification details)
4. Tentative work plan (clearly defining the commencement and completion date)
5. Detailed methodology (including initial system analysis design report)
6. Letter of completion/Reference letters or similar assignments performed in past 5 years.

Additional Information required.

7. Corporate profile (including project portfolios)
8. Company/Partnership Registration certificate
9. Company profile document issued from Ministry of Economic Development
10. Income Tax Registration and Goods and Services Tax Registration Certificates
11. Tax Clearance from Maldives Inland Revenue Authority (MIRA) obtained recently (Not exceeding 2 months from date of announcement)

## 11. Bid security

Each party shall submit a bid security of MVR 260 with 30 days validity period.

## 12. CLARIFICATIONS

For further information, please attend the information session held at the Ministry of National Planning, Housing, and Infrastructure (MNPHI), on 19<sup>th</sup> October 2021 at 1100 hrs.

For further clarification you may email the following address not later than 25<sup>th</sup> October 2021 before 1200 hrs.

Ministry of National Planning, Housing and Infrastructure

Email: [bid.secretariats@planning.gov.mv](mailto:bid.secretariats@planning.gov.mv)

Phone: 4004747 / 4004700

## 13. SUBMISSION OF PROPOSAL

Proposals must be delivered in sealed envelopes titled “**Strata Management System Project Proposal for Ministry of National Planning, Housing and Infrastructure**” together with the submitting party’s name and address to the address below, on **1100hrs of 26<sup>th</sup> October 2021** local time. Electronic submission is not permitted. Late proposals will be rejected. Proposals will be opened in the presence of proponents’ representatives who choose to be present at the address below at the time of proposal opening.

Ministry of National Planning, Housing and Infrastructure

Ameenee Magu,

Maafannu, Male’ 20392, Maldives

Tel: 4004700.

## ANNEX 1

Details of proposed team (This forms a part of proposal)

<b>Role (Specialty Area/Team Leader/Team Members)</b>	<b>Name</b>	<b>Academic and Professional Qualification (Certificate are required to be presented)</b>	<b>Work Experience (Certificates/Reference Letter are required to be presented)</b>
Lead Developer			
Database engineer			
Frontend			
Backend			



**ANNEX 2**

**Price and Delivery Duration**

**Bidder Name:** .....

**Price:**

	<i>Amount (MVR)</i>	<i>GST (MVR)</i>	<i>Total (MVR)</i>
<b>Price for Service</b>	.....	.....	.....
<b>Price for Service in words.</b>	.....	.....	.....

**Delivery Duration (in Calendar Days):** .....